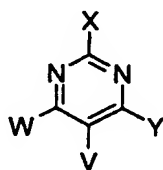## Claims

1.   An electroluminescent device comprising an anode, a cathode and one or a plurality of
     organic compound layers sandwiched therebetween, in which said organic compound
     layers comprise an organic compound containing one ore more pyrimidine moieties.

2.   An electroluminescent device according to claim 1, wherein the organic compound is a
   pyrimidine compound of formula

$$
\begin{array}{c}
X \\
N \diagdown \diagup N \\
W \diagdown \diagup Y \\
V
\end{array}
$$

(I), wherein

V is C_6-C_{30}aryl or C_2-C_{30}heteroaryl, which can be substituted or unsubstituted, in
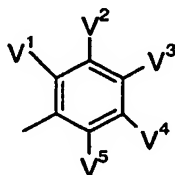
particular $\begin{array}{c} V^2 \\ V^1 \diagdown V^3 \\ \diagup V^4 \\ V^5 \end{array}$, H, C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or
interrupted by D; C_2-C_{18}alkenyl, C_2-C_{18}alkenyl which is substituted by E and/or
interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or
interrupted by D; C_1-C_{18}alkoxy; C_1-C_{18}alkoxy which is substituted by E and/or
interrupted by D; -SR^5; -NR^5R^6;

W is C_6-C_{30}aryl or C_2-C_{30}heteroaryl, which can be substituted or unsubstituted, in
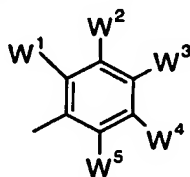
particular $\begin{array}{c} W^2 \\ W^1 \diagdown W^3 \\ \diagup W^4 \\ W^5 \end{array}$, H, C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or
interrupted by D; C_2-C_{18}alkenyl, C_2-C_{18}alkenyl which is substituted by E and/or
interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or
interrupted by D; C_1-C_{18}alkoxy; C_1-C_{18}alkoxy which is substituted by E and/or
interrupted by D; -SR^5; -NR^5R^6;

Y is C_6-C_{30}aryl or C_2-C_{30}heteroaryl, which can be substituted or unsubstituted, in
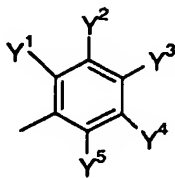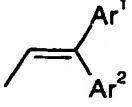
particular (structure with Y^1, Y^2, Y^3, Y^4, Y^5) , H, C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkenyl, C_2-C_{18}alkenyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or interrupted by D; C_1-C_{18}alkoxy; C_1-C_{18}alkoxy which is substituted by E and/or interrupted by D; -SR^5; -NR^5R^6;

X is C_6-C_{30}aryl or C_2-C_{30}heteroaryl, which can be substituted or unsubstituted, in
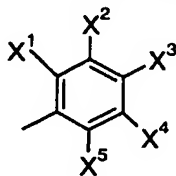
particular (structure with X^1, X^2, X^3, X^4, X^5) , H, C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkenyl, C_2-C_{18}alkenyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or interrupted by D; C_1-C_{18}alkoxy; C_1-C_{18}alkoxy which is substituted by E and/or interrupted by D; -SR^5; -NR^5R^6; wherein the groups

V^1 to V^5, W^1 to W^5, X^1 to X^5 and Y^1 to Y^5 are independently of each other H; halogen, C_6-C_{24}aryl; C_6-C_{24}aryl which is substituted by G; C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_7-C_{18}alkylaryl; C_7-C_{18}alkylaryl which is substituted by E and/or interrupted by D; C_2-C_{18}alkenyl; C_2-C_{18}alkenyl which is

substituted by E and/or interrupted by D; (structure with Ar^1, Ar^2) , wherein Ar^1 is C_6-C_{30}aryl or C_2-C_{30}heteroaryl, especially phenyl, Ar^2 is C_6-C_{30}aryl or C_2-C_{30}heteroaryl, especially phenyl, or H, C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or interrupted by D; C_1-C_{18}alkoxy, C_1-C_{18}alkoxy which is substituted by E and/or interrupted by D; -SR^5; -NR^5R^6; C_2-C_{24}heteroaryl; C_2-C_{24}heteroaryl which is substituted by L; -SOR^4; -SO_2R^4; -COR^8; -$COOR^7$; -$CONR^5R^6$; C_4-C_{18}cycloalkyl; C_4-C_{18}cycloalkyl which is substituted by E and/or interrupted by D; C_4-C_{18}cycloalkenyl; C_4-C_{18}cycloalkenyl which is substituted by E and/or interrupted by D; or

W^5 or Y^5 together with V form a group –$CR^9{}_2$-, -$CR^9{}_2$-$CR^9{}_2$-, -$C(=O)CR^9{}_2$-, -$C(=O)$-, or -CR^9=CR^9-, or

W^5 and Y^5 together with V form a group
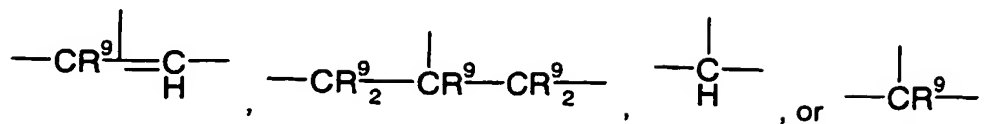
wherein R^9 is H; C_1-C_{18}alkyl, C_1-C_{18}alkyl which is interrupted by –O-, C_6-C_{18}aryl, C_6-C_{18}aryl which is substituted by C_1-C_{18}alkyl, or C_1-C_{18}alkoxy, or

one of the substituents V, W, X, or Y is a group of the formula –Z, -Ar-Z, wherein Ar is C_6-C_{24}aryl or C_2-C_{24}heteroaryl, which can be substituted, in particular

, wherein Z is a group of formula

one of the substituents
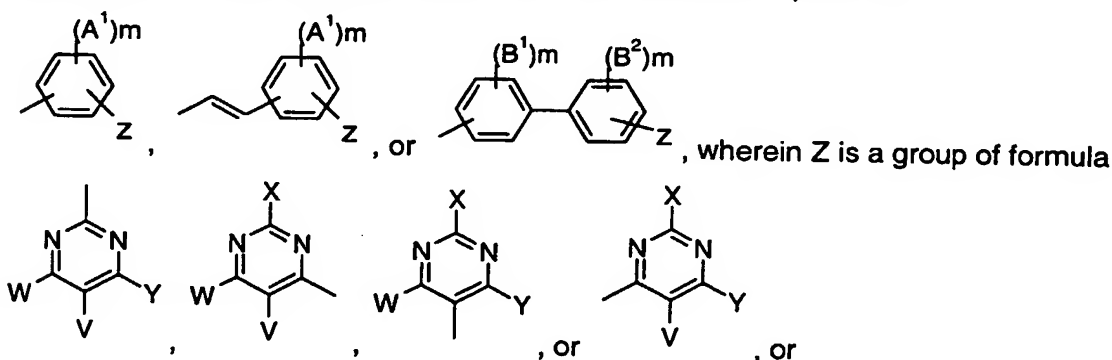
V^1 to V^5, W^1 to W^5, X^1 to X^5, or Y^1 to Y^5 is a group of the formula –Z', -Ar-Z', wherein Ar is C_6-C_{24}aryl or C_2-C_{24}heteroaryl, which can be substituted, in particular

, wherein Z' is a group of formula

, or

wherein
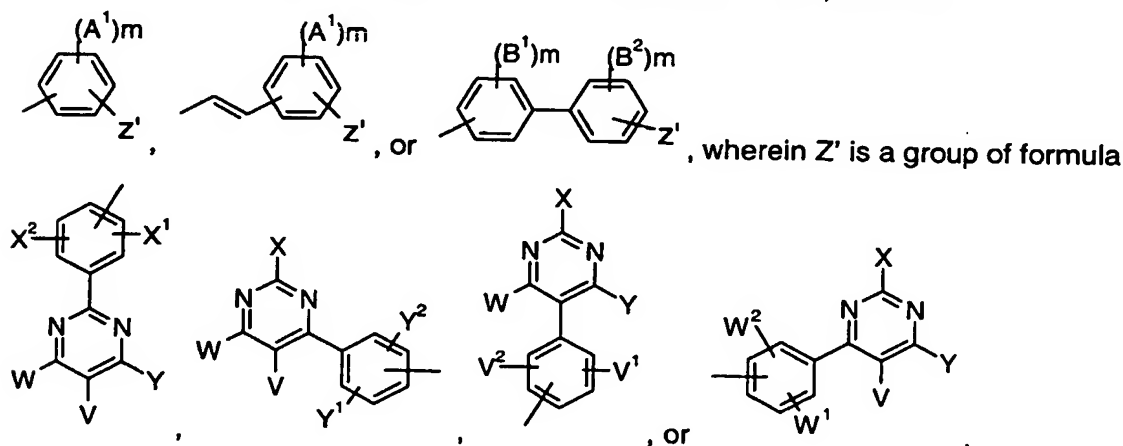
A^1, B^1 and B^2 are independently of each other H; C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by G; C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_7-C_{18}alkylaryl; C_7-C_{18}alkylaryl which is substituted by E and/or interrupted by D; C_2-C_{18}alkenyl; C_2-C_{18}alkenyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or interrupted by D; C_1-C_{18}alkoxy, C_1-C_{18}alkoxy which is substituted by E and/or interrupted by D; -SR^5; -NR^5R^6; C_2-C_{18}heteroaryl; C_2-C_{18}heteroaryl which is substituted by L; -SOR^4; -SO_2R^4;

-COR^8; -COOR^7; -CONR^{5}R^6; C$_4$-C$_{18}$cycloalkyl; C$_4$-C$_{18}$cycloalkyl which is substituted by E and/or interrupted by D; C$_4$-C$_{18}$cycloalkenyl; C$_4$-C$_{18}$cycloalkenyl which is substituted by E and/or interrupted by D; or

two substituents A^1, B^1, B^2 or B^1 and B^2 form a five to seven membered ring, which can be substituted,

m is an integer of 1 to 4; and W^1, W^2, Y^1, Y^2, X^1, X^2, V, W, X and Y are as defined above;

D is -CO-; -COO-; -OCOO-; -S-; -SO-; -SO$_2$-; -O-; -NR^5-; -SiR^{5}R^6-; -POR^5-; -CR^5=CR^6-; or -C≡C-;

E is -OR^5; -SR^5; -NR^{5}R^6; -COR^8; -COOR^7; -CONR^{5}R^6; -CN; -OCOOR^7; or halogen;

G is E; K; heteroaryl; heteroaryl which is substituted by C$_6$-C$_{18}$aryl; C$_6$-C$_{18}$aryl which is substituted by E and/or K;

K is C$_1$-C$_{18}$alkyl; C$_1$-C$_{18}$alkyl which is substituted by E and/or interrupted by D; C$_7$-C$_{18}$alkylaryl which is substituted by E and/or interrupted by D; C$_2$-C$_{18}$alkenyl; C$_2$-C$_{18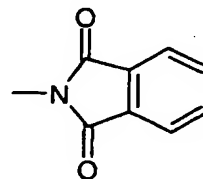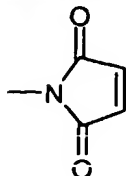}$alkenyl which is substituted by E and/or interrupted by D; C$_2$-C$_{18}$alkynyl; C$_2$-C$_{18}$alkynyl which is substituted by E and/or interrupted by D; C$_1$-C$_{18}$alkoxy, C$_1$-C$_{18}$alkoxy which is substituted by E and/or interrupted by D; C$_4$-C$_{18}$cycloalkyl; C$_4$-C$_{18}$cycloalkyl which is substituted by E and/or interrupted by D; C$_4$-C$_{18}$cycloalkenyl; or C$_4$-C$_{18}$cycloalkenyl which is substituted by E and/or interrupted by D;

L is E; K; C$_6$-C$_{18}$aryl; or C$_6$-C$_{18}$aryl which is substituted by G, E and/or K;

R^4 is C$_6$-C$_{18}$aryl; C$_6$-C$_{18}$aryl which is substituted by C$_1$-C$_{18}$alkyl, C$_1$-C$_{18}$alkoxy; C$_1$-C$_{18}$alkyl; or C$_1$-C$_{18}$alkyl which is interrupted by –O-;

R^5 and R^6 are independently of each other H; C$_6$-C$_{18}$aryl; C$_6$-C$_{18}$aryl which is substituted by C$_1$-C$_{18}$alkyl, C$_1$-C$_{18}$alkoxy; C$_1$-C$_{18}$alkyl; or C$_1$-C$_{18}$alkyl which is interrupted by –O-;

or

R^5 and R^6 together form a five or six membered ring, in particular
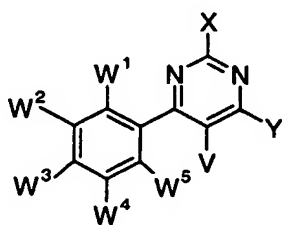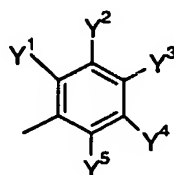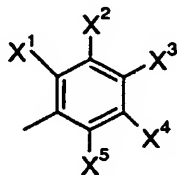

or

,

R^7 is H; C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by C_1-C_{18}alkyl, C_1-C_{18}alkoxy; C_1-C_{18}alkyl; C_1-C_{18}alkyl which is interrupted by –O–;

R^8 is H; C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by C_1-C_{18}alkyl, C_1-C_{18}alkoxy; C_1-C_{18}alkyl; C_1-C_{18}alkyl which is interrupted by –O–.

or two substituents selected from V^1 to V^5, W^1 to W^5, X^1 to X^5, Y^1 to Y^5 which are in neighborhood to each other form a five to seven membered ring,

with the proviso that at least one of the groups V, W, X and Y is a C_6-C_{24}aryl, or C_2-C_{24}heteroaryl group, which can be substituted.

3. An electroluminescent device according to claim 2, comprising a pyrimidine compound of formula

(III), wherein

Y is R^1, if X is   , or X is R^1, if Y is   , R^1 is H, C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkenyl, C_2-C_{18}alkenyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or interrupted by D; C_1-C_{18}alkoxy; C_1-C_{18}alkoxy which is substituted by E and/or interrupted by D; -SR^5; or -NR^5R^6; wherein W^1 to W^5, X^1 to X^5, Y^1 to Y^5, E, D, R^5 and R^6 are as defined in claim 2; and V is H.

4. An electroluminescent device according to claim 2, comprising a pyrimidine compound of formula
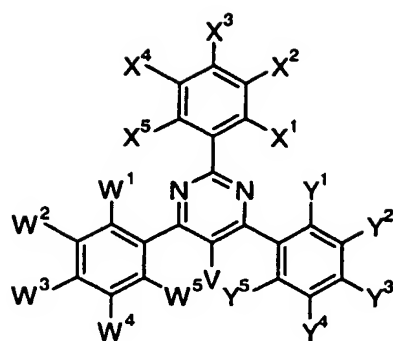
(IV), wherein

V, W^1 to W^5, X^1 to X^5 and Y^1 to Y^5 are as defined in claim 2, especially W^3, X^3 and Y^3 are selected from the group consisting of C_6-C_{24}aryl; C_6-C_{24}aryl which is substituted by G; C_2-C_{24}heteroaryl; C_2-C_{24}heteroaryl which is substituted by L, C_1-C_{18}alkoxy, -SR^5; -NR^5R^6, wherein G, L, R^5 and R^6 are as defined in claim 2,

V is H, and W^1 and W^5, Y^1 and Y^5 as well as X^1 and X^5 are independently of each other H; C_1-C_{18}alkyl; or C_1-C_{18}alkyl which is substituted by E and/or interrupted by D, wherein E and D are as defined in claim 2.

5. An electroluminescent device according to claim 2, wherein V is a group of the formula
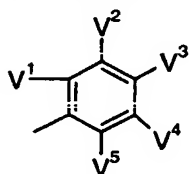
, H, C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkenyl, C_2-C_{18}alkenyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or interrupted by D; C_1-C_{18}alkoxy; C_1-C_{18}alkoxy which is substituted by E and/or interrupted by D; -SR^5; or -NR^5R^6; and
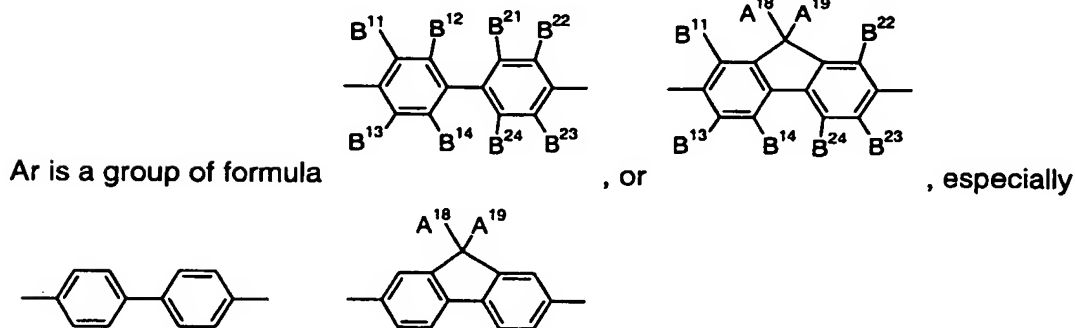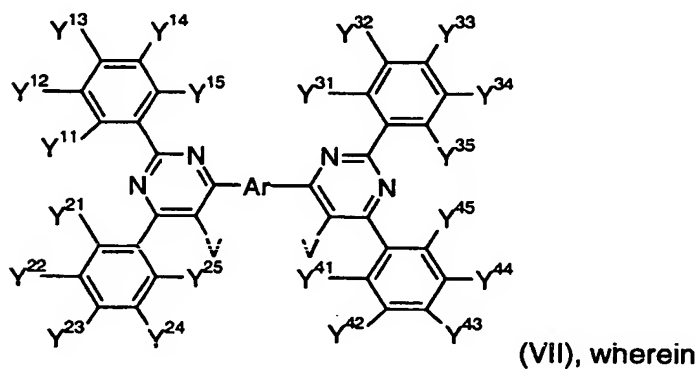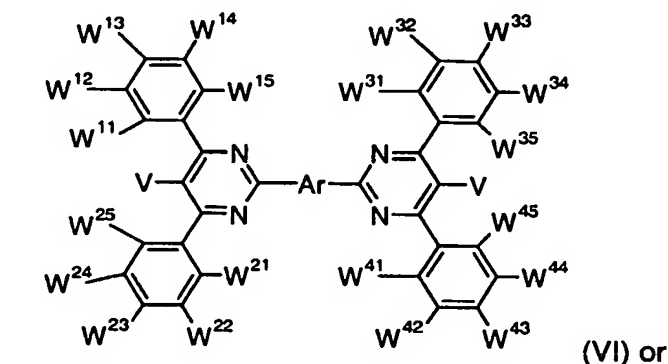
W is a group of the formula

, or

, in
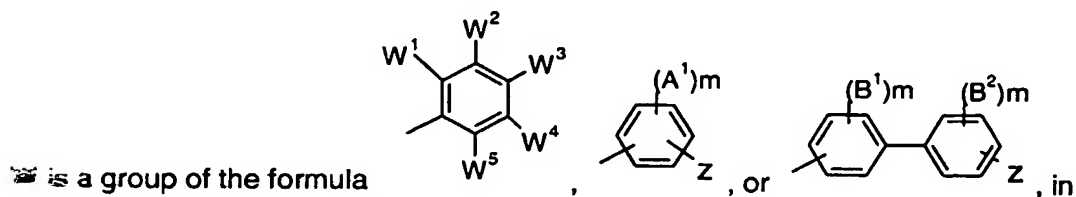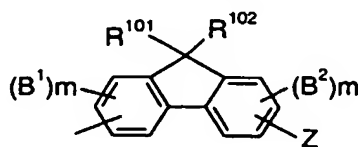
particular

, H, C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkenyl, C_2-C_{18}alkenyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or interrupted by D; C_1-C_{18}alkoxy; C_1-C_{18}alkoxy which is substituted by E and/or

interrupted by D; -SR^5; or -NR^{5}R^6; wherein W^1 to W^5, D, V^1 to V^5, E, A^1, B^1, B^2, R^5, R^6, m and Z are as defined in claim 2 and R^{101} and R^{102} are independently of each other H, C$_1$-C$_8$alkyl, C$_6$-C$_{24}$aryl, or C$_5$-C$_7$cycloalkyl, in particular H or C$_{1-4}$-alkyl.

5   6.   An electroluminescent device according to claim 2, comprising a pyrimidine compound of formula

(VI) or

(VII), wherein

Ar is a group of formula

, or

, especially

10   , or   ,

W^{11} to W^{15}, W^{21} to W^{25}, W^{31} to W^{35}, W^{41} to W^{45}, Y^{11} to Y^{15}, Y^{21} to Y^{25}, Y^{31} to Y^{35} and Y^{41} to Y^{45} are independently of each other H; C$_6$-C$_{24}$aryl; C$_6$-C$_{24}$aryl which is substituted by G; C$_1$-C$_{18}$alkyl; C$_1$-C$_{18}$alkyl which is substituted by E and/or interrupted by D; C$_7$-C$_{18}$alkylaryl; C$_7$-C$_{18}$alkylaryl which is substituted by E and/or interrupted by D; C$_2$-C$_{18}$alkenyl; C$_2$-C$_{18}$alkenyl which is substituted by E and/or interrupted by D; C$_2$-C$_{18}$alkynyl; C$_2$-C$_{18}$alkynyl which is substituted by E and/or interrupted by D; C$_1$-

15

C_{18}alkoxy, C_1-C_{18}alkoxy which is substituted by E and/or interrupted by D; -SR^5; -NR^{5}R^6; C_2-C_{24}heteroaryl; C_2-C_{24}heteroaryl which is substituted by L; -SOR^4; -SO$_2$R^4; -COR^8; -COOR^7; -CONR^{5}R^6; C_4-C_{18}cycloalkyl; C_4-C_{18}cycloalkyl which is substituted by E and/or interrupted by D; C_4-C_{18}cycloalkenyl; C_4-C_{18}cycloalkenyl which is substituted by E and/or interrupted by D;

V is H; C_6-C_{24}aryl; C_6-C_{24}aryl which is substituted by G; C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_7-C_{18}alkylaryl; C_7-C_{18}alkylaryl which is substituted by E and/or interrupted by D; C_2-C_{18}alkenyl; C_2-C_{18}alkenyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or interrupted by D; C_1-C_{18}alkoxy, C_1-C_{18}alkoxy which is substituted by E and/or interrupted by D; -SR^5; or -NR^{5}R^6; C_2-C_{24}heteroaryl; C_2-C_{24}heteroaryl which is substituted by L; -SOR^4; -SO$_2$R^4; -COR^8; -COOR^7; -CONR^{5}R^6; C_4-C_{18}cycloalkyl; C_4-C_{18}cycloalkyl which is substituted by E and/or interrupted by D; C_4-C_{18}cycloalkenyl; C_4-C_{18}cycloalkenyl which is substituted by E and/or interrupted by D;

A^{18} and A^{19} are independently of each other H, C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by E,

B^{11} to B^{14} and B^{21} to B^{24} are independently of each other H; C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by G; C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_7-C_{18}alkylaryl; C_7-C_{18}alkylaryl which is substituted by E and/or interrupted by D; C_2-C_{18}alkenyl; C_2-C_{18}alkenyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or interrupted by D; C_1-C_{18}alkoxy, C_1-C_{18}alkoxy which is substituted by E and/or interrupted by D; -SR^5; -NR^{5}R^6; C_2-C_{18}heteroaryl; C_2-C_{18}heteroaryl which is substituted by L; -SOR^4; -SO$_2$R^4; -COR^8; -COOR^7; or -CONR^{5}R^6; C_4-C_{18}cycloalkyl; C_4-C_{18}cycloalkyl which is substituted by E and/or interrupted by D; C_4-C_{18}cycloalkenyl; C_4-C_{18}cycloalkenyl which is substituted by E and/or interrupted by D, especially H;

wherein D, E, G, L, R^4, R^5, R^6, R^7 and R^8 are as defined in claim 2.

7. An electroluminescent device according to claim 2, wherein the pyrimidine compound has the following formula

(Xa), or   (Xb)
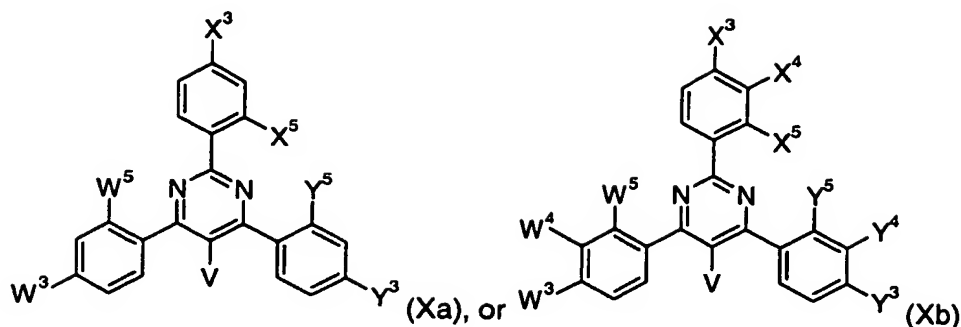
wherein V is H, or C_1-C_8-alkyl,

X^3 and X^4 are independently of each other H, C_1-C_8alkyl, C_1-C_8alkoxy, C_1-C_8thioalkyl, or phenyl,

X^5 is H, or C_1-C_8alkoxy,

W^5 is H, C_1-C_8alkyl, or $O(CH_2)_{n1}$-X,

Y^5 is H, C_1-C_8alkyl, or $O(CH_2)_{n1}$-X,

Y^3, Y^4, W^3 and W^4 are independently of each other C_1-C_8alkyl, C_1-C_8alkoxy, C_1-C_8thioalkyl, halogen, in particular Br, phenyl, or $O(CH_2)_{n1}$-X, wherein n1 is an integer of 1 to 5 and X is $-O$-$(CH_2)_{m1}CH_3$, $-OC(O)$-$(CH_2)_{m1}CH_3$, $-C(O)$-O-C_1-C_8alkyl, $-NR^{103}R^{104}$, wherein m1 is an integer of 0 to 5 and R^{103} and R^{104} are independently of each other H, or C_1-C_8-alkyl, or R^{103} and R^{104} together form a five or six membered heterocyclic ring,

in particular ; or the following formula

(XI),
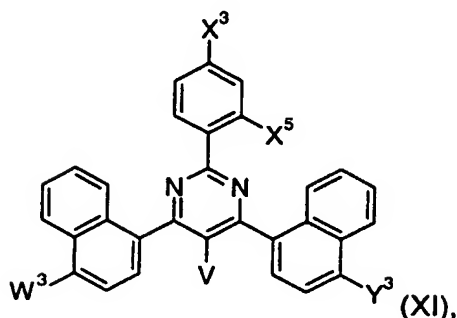
wherein V is H, or C_1-C_8alkyl,

W^3 is H, C_1-C_8alkyl, or C_1-C_8alkoxy,

X^3 is H, C_1-C_8alkoxy, phenyl or $O(CH_2)_{n1}$-X,

X^5 is H, C_1-C_8alkoxy, phenyl or $O(CH_2)_{n1}$-X,

Y^3 is H, C_1-C_8alkyl, or C_1-C_8alkoxy, wherein n1 is an integer of 1 to 4 and X is $-O$-$(CH_2)_{m1}CH_3$, $-OC(O)$-$(CH_2)_{m1}CH_3$, $-C(O)$-O-C_1-C_8alkyl, wherein m1 is an integer of 0 to 5; or the following formula

(XIIa), or

(XIIb),
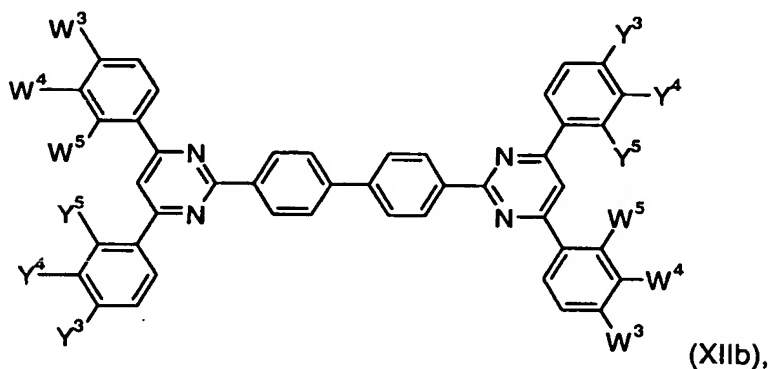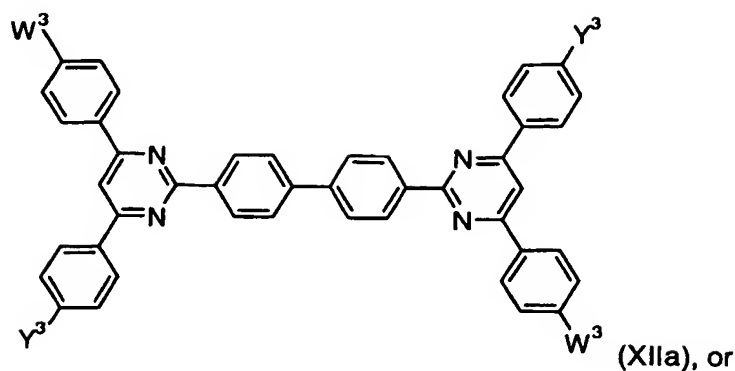
wherein W^3 and W^4 are independently of each other H, -$NR^{103}R^{104}$, C_1-C_8thioalkyl, or C_1-C_8alkoxy,

Y³ and Y^4 are independently of each other H, -$NR^{103}R^{104}$, C_1-C_8thioalkyl, or C_1-C_8alkoxy, wherein R^{103} and R^{104} are independently of each other H, or C_1-C_8alkyl.
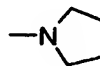
W^5 is H, C_1-C_8alkyl, or $O(CH_2)_{n1}$-X,
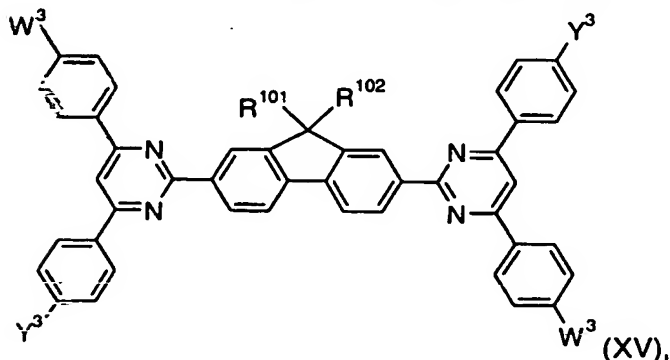
Y^5 is H, C_1-C_8alkyl, or $O(CH_2)_{n1}$-X,

wherein n1 is an integer of 1 to 5 and X is –O-$(CH_2)_{m1}CH_3$, –$OC(O)$-$(CH_2)_{m1}CH_3$, -$C(O)$-O-C_1-C_8alkyl, -$NR^{103}R^{104}$, wherein m1 is an integer of 0 to 5 and R^{103} and R^{104} are independently of each other H, or C_1-C_8-alkyl, or R^{103} and R^{104} together form a five

or six membered heterocyclic ring, in particular ; or the following formula

(XV),

wherein W^3 is H, -$NR^{103}R^{104}$, C_1-C_8thioalkyl, or C_1-C_8alkoxy,

Y^3 is H, $-NR^{103}R^{104}$, C_1-C_8thioalkyl, or C_1-C_8alkoxy, wherein R^{103} and R^{104} are independently of each other H, or C_1-C_8alkyl,

R^{101} and R^{102} are independently of each other H, C_1-C_8alkyl, phenyl, or C_5-C_7cycloalkyl, in particular cyclohexyl; or the following formula

(XVI),
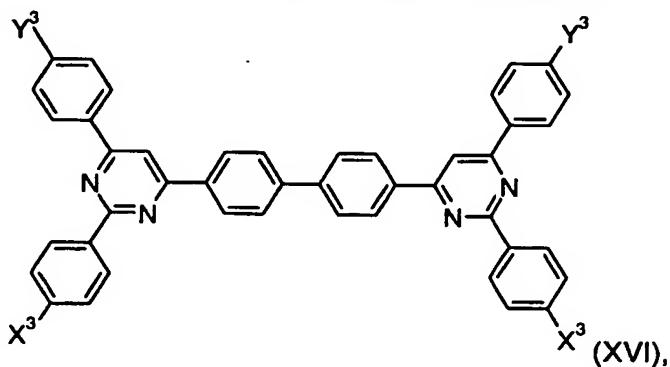
wherein Y^3 is H, $-NR^{103}R^{104}$, C_1-C_8thioalkyl, or C_1-C_8alkoxy,

X^3 is H, $-NR^{103}R^{104}$, C_1-C_8thioalkyl, or C_1-C_8alkoxy, wherein R^{103} and R^{104} are independently of each other H, or C_1-C_8alkyl; or the following formula
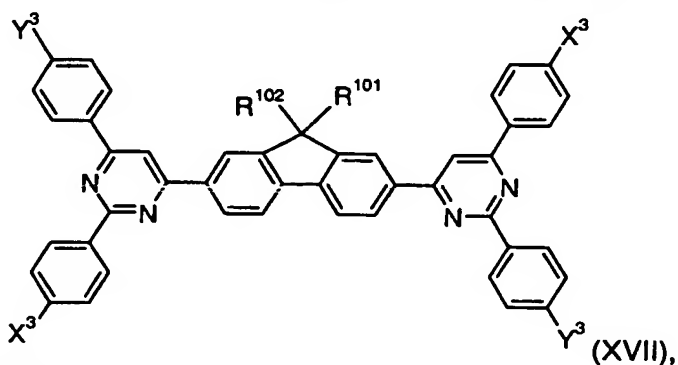
(XVII),

Y^3 is H, $-NR^{103}R^{104}$, C_1-C_8thioalkyl, or C_1-C_8alkoxy,

X^3 is H, $-NR^{103}R^{104}$, C_1-C_8thioalkyl, or C_1-C_8alkoxy, wherein R^{103} and R^{104} are independently of each other H, or C_1-C_8alkyl, and R^{101} and R^{102} are independently of each other H, C_1-C_8alkyl, phenyl, or C_5-C_7cycloalkyl, in particular cyclohexyl.

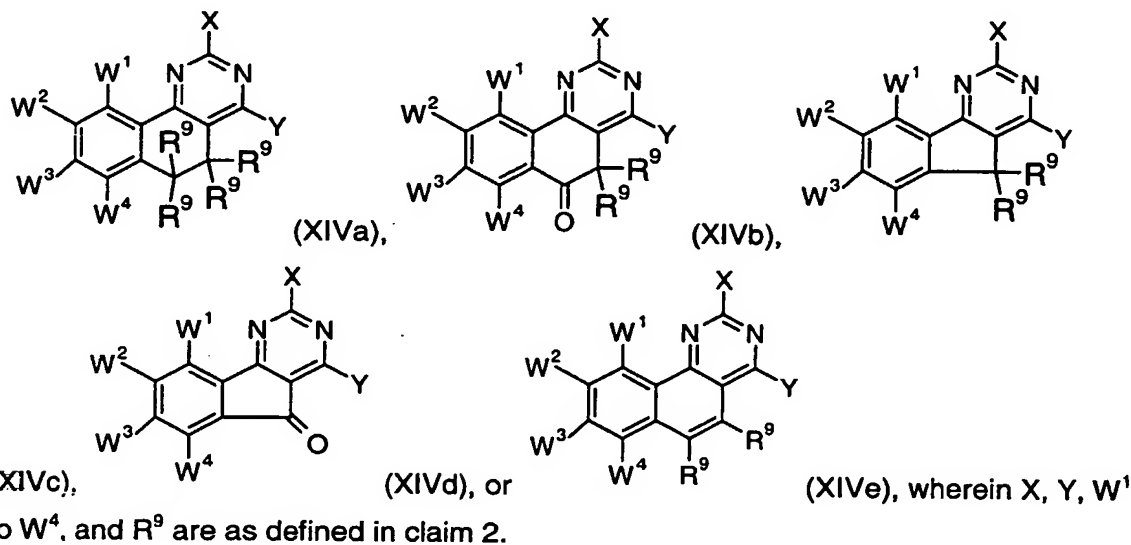8. An electroluminescent device according to claim 2, wherein W and Y are groups of the formula
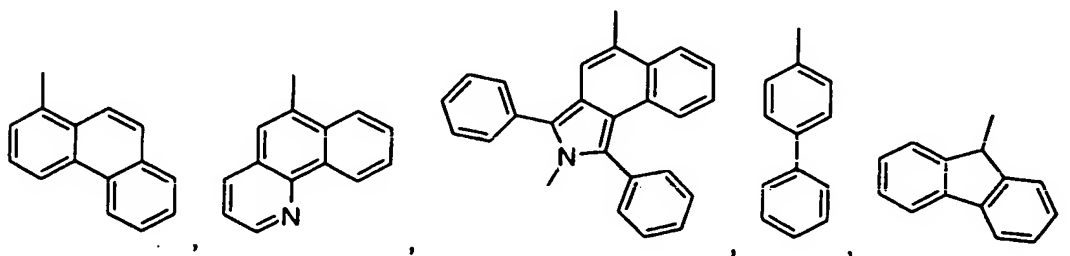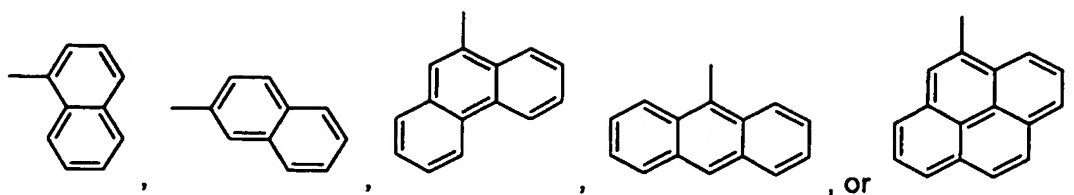
,   ,   ,   ,   ,

9. An electroluminescent device according to claim 2, comprising a pyrimidine compound of formula

(XIVa), (XIVb),

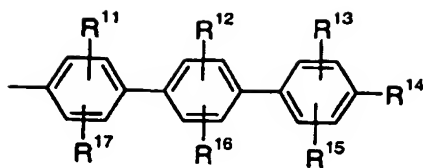(XIVc), (XIVd), or (XIVe), wherein X, Y, W^1 to W^4, and R^9 are as defined in claim 2.

10. An electroluminescent device according to claim 2, comprising a pyrimidine compound of formula I, wherein V is hydrogen,
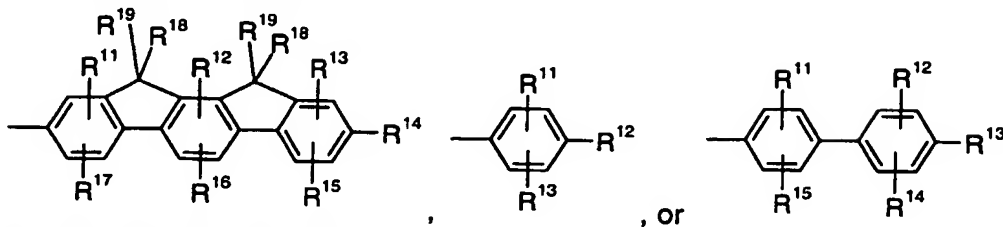W and Y are independently of each other a group of formula


, or , and

X is a group of formula

,

,

, or
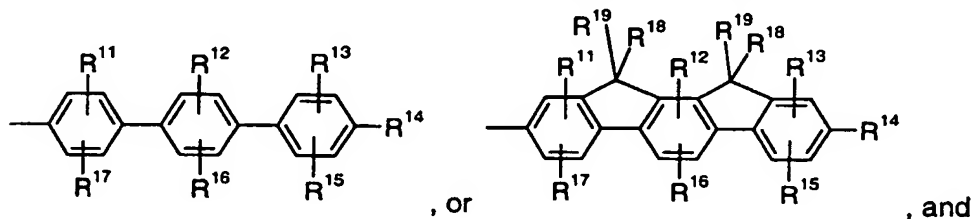
, wherein

R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16} and R^{17} are independently of each other H, C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by E; E, C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by E;

R^{18} and R^{19} are independently of each other H, C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by E;

D is -CO-; -COO-; -OCOO-; -S-; -SO-; -SO$_2$-; -O-; -NR^5-; -SiR^{5}R^6-; -POR^5-; -CR^5=CR^6-; or -C≡C-;

E is -OR^5; -SR^5; -NR^{5}R^6; -COR^8; -COOR^7; -CONR^{5}R^6; -CN; -OCOOR^7; or halogen; wherein
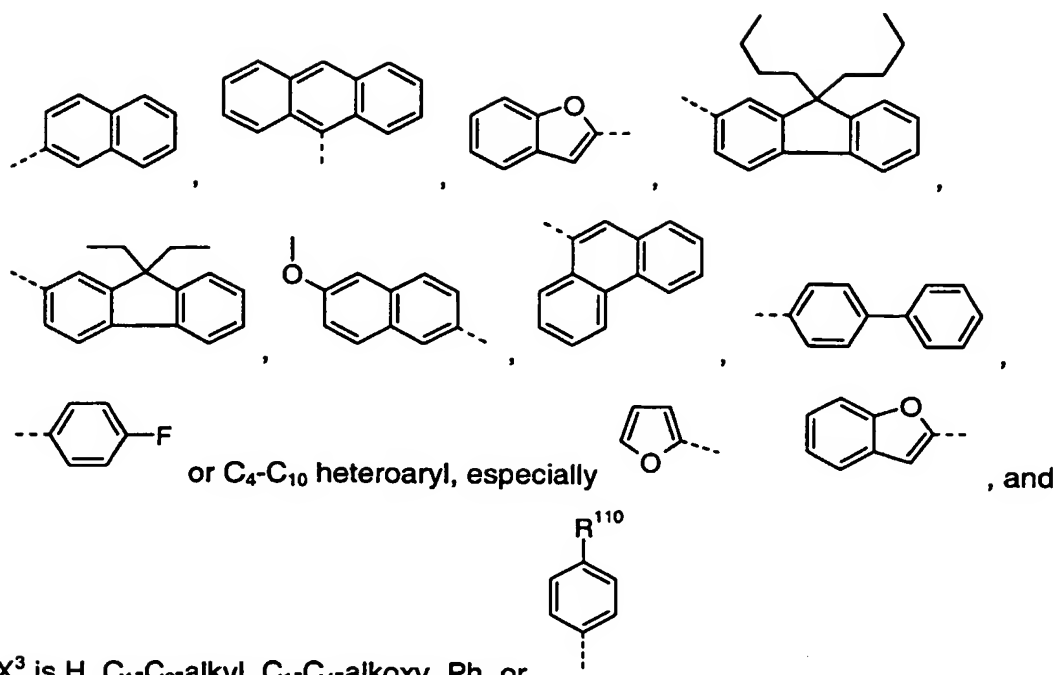
R^5, R^6, R^7 and R^8 are as defined in claim 2.

11. An electroluminescent device according to claim 2, comprising a pyrimidine compound of formula

(XIa), wherein W^3 and Y^3 are a group of formula

,
wherein
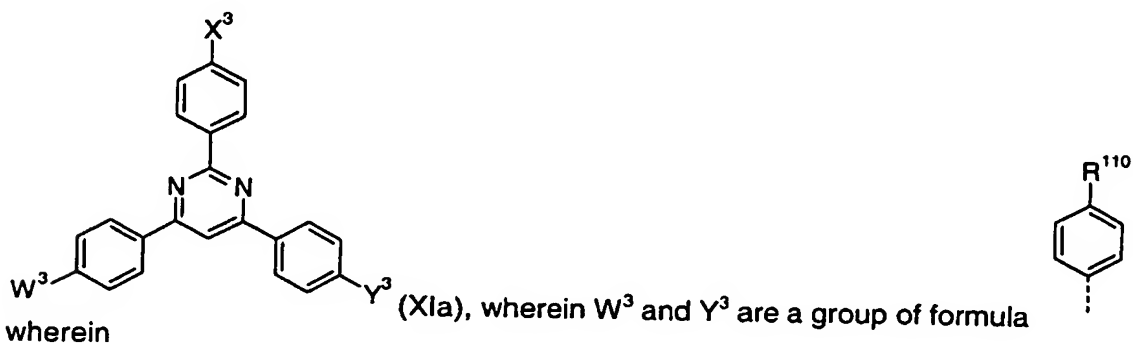
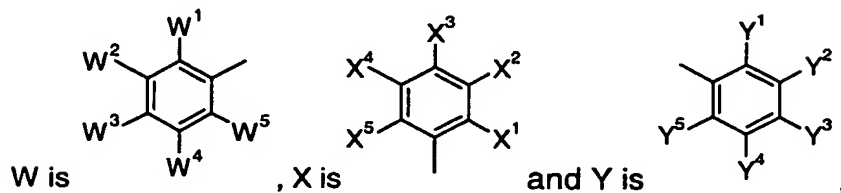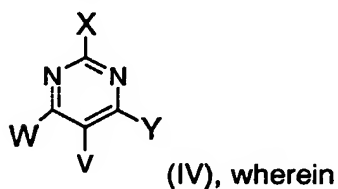R^{110} is C_6-C_{10}-aryl, C_6-C_{10}-aryl which is substituted by C_1-C_6-alkyl, C_1-C_4-alkoxy
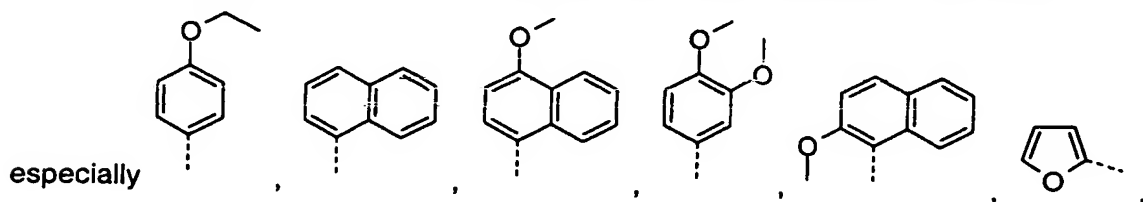
especially , , , , , ,

, , , ,

, , ,

or C$_4$-C$_{10}$ heteroaryl, especially

, and

X^3 is H, C$_1$-C$_6$-alkyl, C$_1$-C$_4$-alkoxy, Ph, or

.

12. A pyrimidine compound of formula

(IV), wherein

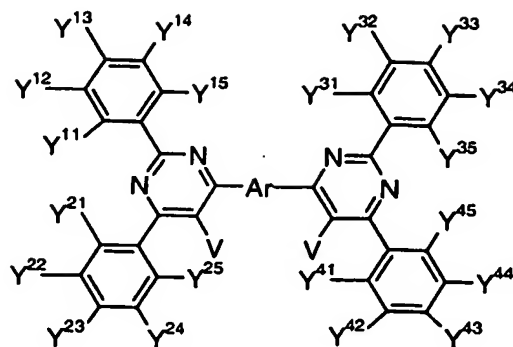

W is , X is and Y is ,

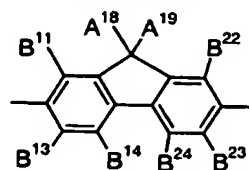V, W^1 to W^5, X^1 to X^5 and Y^1 to Y^5 are as defined in claim 2.

13. A pyrimidine compound of formula

(VI) or
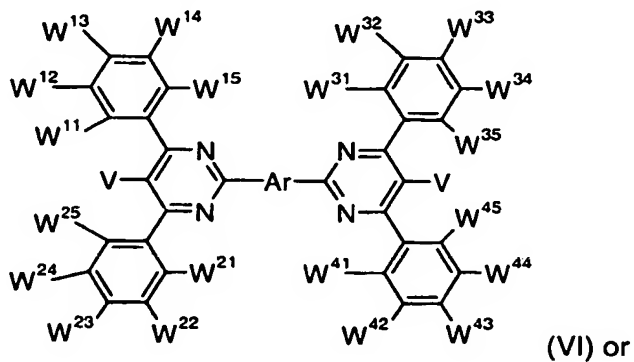
(VII), wherein
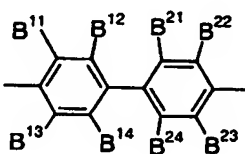
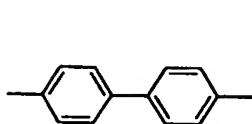Ar is a group of formula

, or

, especially

, or

W^{11} to W^{15}, W^{21} to W^{25}, W^{31} to W^{35}, W^{41} to W^{45}, Y^{11} to Y^{15}, Y^{21} to Y^{25}, Y^{31} to Y^{35} and Y^{41} to Y^{45} are independently of each other H; C_6-C_{24}aryl; C_6-C_{24}aryl which is substituted by G; C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_7-C_{18}alkylaryl; C_7-C_{18}alkylaryl which is substituted by E and/or interrupted by D; C_2-C_{18}alkenyl; C_2-C_{18}alkenyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or interrupted by D; C_1-C_{18}alkoxy, C_1-C_{18}alkoxy which is substituted by E and/or interrupted by D; -SR^5; -NR^{5}R^6; C_2-C_{24}heteroaryl; C_2-C_{24}heteroaryl which is substituted by L; -SOR^4; -SO2R^4; -COR^8; -COOR^7; -CONR^{5}R^6; C_4-C_{18}cycloalkyl; C_4-C_{18}cycloalkyl which is substituted by E and/or interrupted by D; C_4-C_{18}cycloalkenyl; C_4-C_{18}cycloalkenyl which is substituted by E and/or interrupted by D;

V is H; C_6-C_{24}aryl; C_6-C_{24}aryl which is substituted by G; C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_7-C_{18}alkylaryl; C_7-C_{18}alkylaryl which is substituted by E and/or interrupted by D; C_2-C_{18}alkenyl; C_2-C_{18}alkenyl which is substituted by E and/or interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or interrupted by D; C_1-C_{18}alkoxy, C_1-C_{18}alkoxy which is substituted by E and/or interrupted by D; -SR^5; or -NR^{5}R^6; C_2-C_{24}heteroaryl; C_2-C_{24}heteroaryl which is substituted by L; -SOR^4; -SO2R^4; -COR^8; -COOR^7; -CONR^{5}R^6;

C_4-C_{18}cycloalkyl; C_4-C_{18}cycloalkyl which is substituted by E and/or interrupted by D; C_4-C_{18}cycloalkenyl; C_4-C_{18}cycloalkenyl which is substituted by E and/or interrupted by D;

A^{18} and A^{19} are independently of each other H, C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by

5   E,

B^{11} to B^{14} and B^{21} to B^{24} are independently of each other H; C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by G; C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_7-C_{18}alkylaryl; C_7-C_{18}alkylaryl which is substituted by E and/or interrupted by D; C_2-C_{18}alkenyl; C_2-C_{18}alkenyl which is substituted by E and/or

10   interrupted by D; C_2-C_{18}alkynyl; C_2-C_{18}alkynyl which is substituted by E and/or interrupted by D; C_1-C_{18}alkoxy, C_1-C_{18}alkoxy which is substituted by E and/or interrupted by D; -SR^5; -NR^5R^6; C_2-C_{18}heteroaryl; C_2-C_{18}heteroaryl which is substituted by L; -SOR^4; -SO_2R^4; -COR^8; -$COOR^7$; or -$CONR^5R^6$; C_4-C_{18}cycloalkyl; C_4-C_{18}cycloalkyl which is substituted by E and/or interrupted by D; C_4-C_{18}cycloalkenyl; C_4-

15   C_{18}cycloalkenyl which is substituted by E and/or interrupted by D; wherein D, E, G, L, R^4, R^5, R^6, R^7 and R^8 are as defined in claim 2.
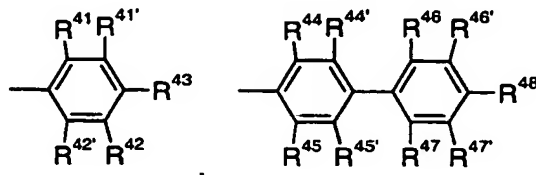
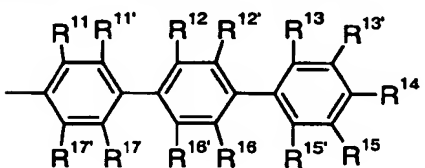14.   A pyrimidine compound of formula I according to claim 12, wherein

at least one of the groups W, X and Y is a group of formula

,
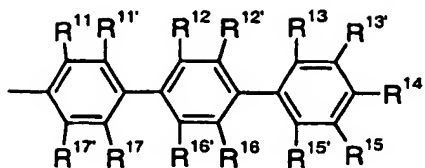
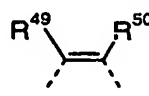and the other groups are independently of each other an aryl group or a heteroaryl
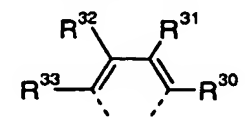

group, especially a group of formula

, or

, wherein

R^{11}, $R^{11'}$, R^{12}, $R^{12'}$, R^{13}, $R^{13'}$, R^{15}, $R^{15'}$, R^{16}, $R^{16'}$, R^{17}, $R^{17'}$, R^{41}, $R^{41'}$, R^{42}, $R^{42'}$, R^{44}, $R^{44'}$, R^{45}, $R^{45'}$, R^{46}, $R^{46'}$, R^{47} and $R^{47'}$ are independently of each other H, E, C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by E; C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; C_7-C_{18}aralkyl; or C_7-C_{18}aralkyl which is substituted by E; or

$R^{11'}$ and R^{12}, $R^{12'}$ and R^{13}, $R^{15'}$ and R^{16}, $R^{16'}$ and R^{17}, $R^{44'}$ and R^{46} and/or $R^{45'}$ and R^{47} are each a divalent group L^1 selected from an oxygen atom, an sulfur atom, $>CR^{118}R^{119}$


$>SiR^{118}R^{119}$, or , wherein

R^{118} and R^{119} are independently of each other C_1-C_{18}alkyl; C_1-C_{18}alkoxy, C_6-C_{18}aryl; C_7-C_{18}aralkyl;

R^{11} and $R^{11'}$, R^{12} and $R^{12'}$, R^{13} and $R^{13'}$, $R^{13'}$ and R^{14}, R^{14} and R^{15}, R^{15} and $R^{15'}$, R^{16} and $R^{16'}$, R^{17} and $R^{17'}$, R^{41} and $R^{41'}$, R^{42} and $R^{42'}$, $R^{42'}$ and R^{43}, $R^{41'}$ and R^{43}, R^{44} and $R^{44'}$, R^{45} and $R^{45'}$, R^{46} and $R^{46'}$, R^{47} and $R^{47'}$, $R^{46'}$ and R^{48} and/or $R^{47'}$ and R^{48} are each a divalent

group , wherein

R^{30}, R^{31}, R^{32}, R^{33}, R^{49} and R^{50} are independently of each other H, C_1-C_{18}alkyl; C_1-C_{18}alkyl, which is substituted by E and/or interrupted by D; E; C_6-C_{18}aryl; C_6-C_{18}aryl, which is substituted by E;

R^{14} is H, C_2-C_{30}heteroaryl, C_6-C_{30}aryl, or C_6-C_{30}aryl which is substituted by E, C_1-C_{18}alkyl; or C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; especially
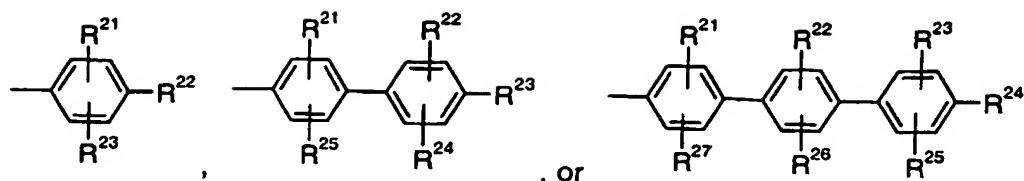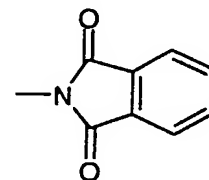
R^{21}, R^{22}, R^{23}, R^{24}, R^{25}, R^{26} and R^{27} are independently of each other H, E, C_1-C_{18}alkyl; C_1-C_{18}alkyl which is substituted by E and/or interrupted by D; E; C_7-C_{18}aralkyl; C_7-C_{18}aralkyl which is substituted by E;

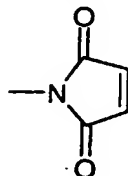R^{43} and R^{48} are independently of each other H, E; C_1-C_{18}alkyl; C_1-C_{18}alkyl, which is substituted by E and/or interrupted by D; C_2-C_{30}heteroaryl; C_7-C_{18}aralkyl; C_7-C_{18}aralkyl which is substituted by E;

D is -CO-; -COO-; -OCOO-; -S-; -SO-; -SO_2-; -O-; -NR^5-; SiR^5R^6-; -POR^5-; -CR^9=CR^{10}-; or -C≡C-;

E is -OR^5; -SR^5; -NR^5R^6; -COR^8; -COOR^7; -CONR^5R^6; -CN; or halogen, especially F, or Cl; wherein R^5 and R^6 are independently of each other C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by C_1-C_{18}alkyl, C_1-C_{18}alkyl; or C_1-C_{18}alkyl which is interrupted by -O-; or

R^5 and R^6 together form a five or six membered ring, in particular

or

R^7 is C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by C_1-C_{18}alkyl, C_1-C_{18}alkyl; or C_1-C_{18}alkyl which is interrupted by -O-;

R^8 is C_7-C_{12}alkylaryl; C_1-C_{18}alkyl; or C_1-C_{18}alkyl which is interrupted by -O-; and

R^9 and R^{10} are independently of each other H, C_6-C_{18}aryl; C_6-C_{18}aryl which is substituted by C_1-C_{18}alkyl, C_1-C_{18}alkyl; or C_1-C_{18}alkyl which is interrupted by -O-.

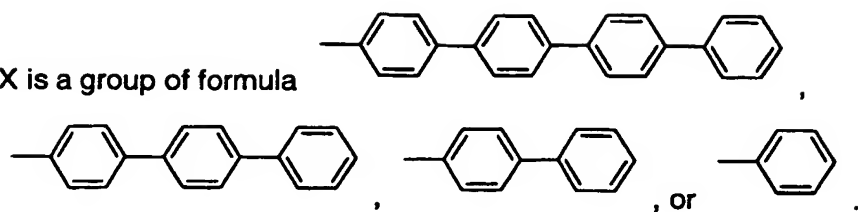15. A pyrimidine compound according to claim 14, wherein
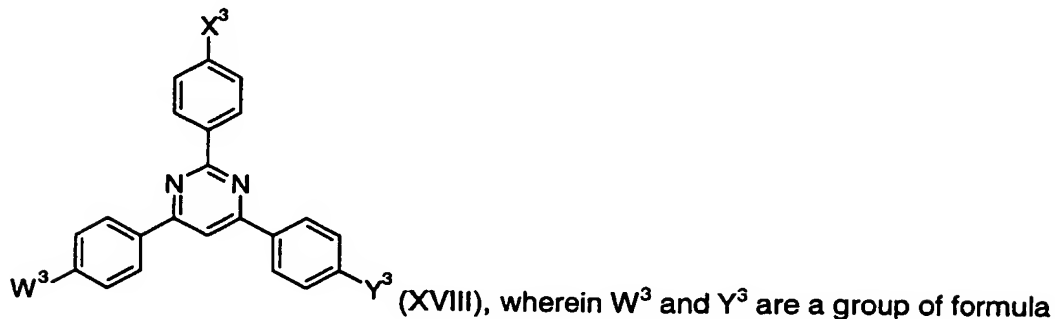V is hydrogen,

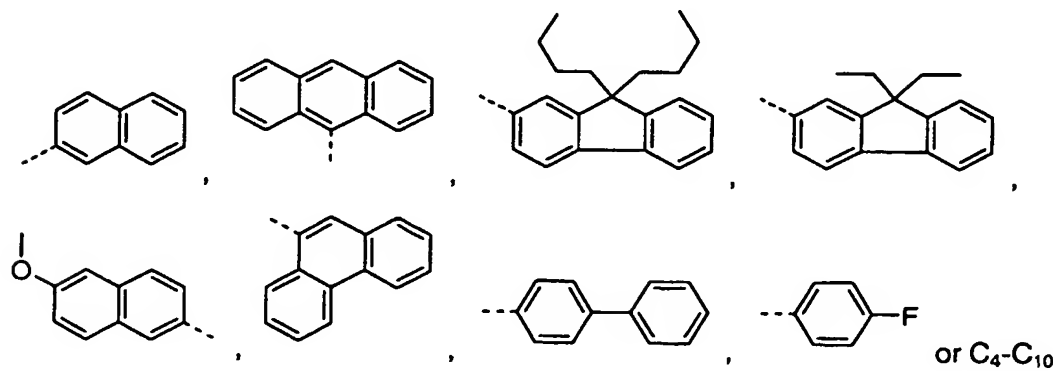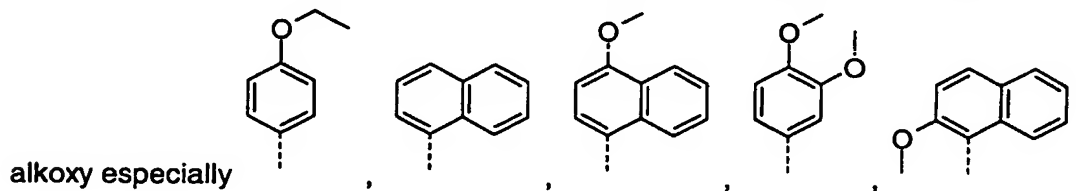W and Y are a group of formula

or

,and

X is a group of formula

,

,

, or

.
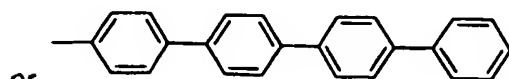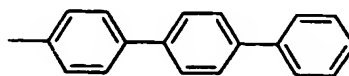
16. A pyrimidine compound according to claim 12 of formula

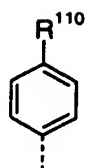(XVIII), wherein W^3 and Y^3 are a group of formula

, wherein

R^{110} is C_6-C_{10}-aryl, such as phenyl, 1-naphthyl, 2-naphthyl, 3- or 4-biphenyl, 9-phenanthryl, 2- or 9-fluorenyl, which is optionally substituted by C_1-C_6-alkyl, or C_1-C_4-

alkoxy especially

,

,

,

,

,

,

,

,

,

,

,

,

or C_4-C_{10}-

heteroaryl, especially

, and

X^3 is H, C$_1$-C$_6$-alkyl, C$_1$-C$_4$-alkoxy, Ph, or

R^{110}

.